

REMARKS

Claims 1-5, 21-42 and 49-50 are pending, and claims 6-20 and 43-48 have been withdrawn with traverse under a restriction requirement. Claim 36 is allowed. Claims 1, 21, 27, 33, 37-38 and 49-50 have been amended simply to clarify either an electromagnetic read-write head or a magnetic data-storage disk. In light of the following, all of the pending claims are now in condition for allowance. If, after considering this response, the Examiner does not agree that all of the claims are allowable, then she is requested to schedule a teleconference with the Applicant's attorney to further prosecution of the application.

Rejection of claims 1-3 and 5 under 35 U.S.C. § 102(b) as being anticipated by Nakane et al. (US 6,091,699)

Claim 1

Claim 1, as amended, recites a circuit operable to recover servo data from a servo signal generated by an electromagnetic read-write head that is coupled to the circuit with a connection polarity.

For example, referring, e.g., to FIGS. 1 and 5-6 of the present application, an electromagnetic read-write head 14 reads servo data from a magnetic data-storage disk 12. The electromagnetic read-write head 14 is coupled to a servo circuit 60 with a connection polarity (head connection reversed or not reversed), and a Viterbi detector 100 recovers a sync mark from the servo signal. A comparator 104 determines the connection polarity of the electromagnetic read-write head 14 from the recovered sync mark. It should be noted that, as described throughout the present application, the read-write head 14 is an electromagnetic read-write head that reads servo data from a magnetic data-storage disk.

Nakane, on the other hand, does not disclose a circuit operable to recover servo data from a servo signal generated by an electromagnetic read-write head that is coupled to the circuit with a connection polarity. In fact, Nakane does not even disclose any kind of magnetic data-storage disk whatsoever, let alone an electromagnetic read-write head. Instead, Nakane discloses an optical disk 100 having a single spiral

land/groove (SS-L/G) format, and an optical head 107 that does not have a connection polarity (FIGS. 4 and 14). After reviewing Nakane in its entirety, the Applicant's attorney is unable to find any mention of an electromagnetic read-write head or a magnetic data-storage disk. The Examiner even concedes on page 9 of the final Office Action (dated January 30, 2007) that Nakane does not disclose any kind of magnetic data-storage device. Therefore, Nakane does not satisfy the limitations of claim 1.

Claims 2-3 and 5

Claims 2-3 and 5 are patentable by virtue of their dependencies from independent claim 1.

Rejection of claims 4, 21-23, 27, 30, 32-33, 37-38 and 49-50 under 35 U.S.C. § 103(a) as being unpatentable over Nakane in view of Hayami (US 6,477,125)

Claim 21

Claim 21 recites an electromagnetic read head that is coupled to the Viterbi detector with a connection polarity, and a comparator operable to determine the connection polarity from the recovered synchronization mark.

Claim 21 is patentable for reasons similar to those recited above in support of the patentability of claim 1.

Claim 27

Claim 27, as amended, recites a servo signal having a phase that represents a connection polarity of an electromagnetic read head, and determining the phase of the servo signal from the recovered synchronization mark.

Claim 27 is patentable for reasons similar to those recited above in support of the patentability of claim 21.

Claim 33

Claim 33, as amended, recites a servo signal having a phase that represents a connection polarity of an electromagnetic read head, and determining the phase of the servo signal from the recovered synchronization mark.

Claim 33 is patentable for reasons similar to those recited above in support of the patentability of claim 27.

Claim 37

Claim 37, as amended, recites a magnetic data-storage disk.

Claim 37 is patentable for reasons similar to those recited above in support of the patentability of claim 1.

Claim 38

Claim 38, as amended, recites generating a servo signal with an electromagnetic read head.

Claim 38 is patentable for reasons similar to those recited above in support of the patentability of claim 27.

Claim 49

Claim 49, as amended, recites sampling a servo signal from an electromagnetic read head.

Claim 49 is patentable for reasons similar to those recited above in support of the patentability of claim 37.

Claim 50

Claim 50, as amended, recites sampling a servo signal from an electromagnetic read head.

Claim 50 is patentable for reasons similar to those recited above in support of the patentability of claim 49.

Rejection of claims 24, 28, 35 and 39-41 under 35 U.S.C. § 103(a) as being unpatentable over Nakane and Hayami in view of Tuttle et al (US 6,108,151)

Claims 24, 28, 35 and 39-41 are patentable by virtue of their respective dependencies from independent claims 21, 27, 33 and 38.

Rejection of claims 29, 31 and 34 under 35 U.S.C. § 103(a) as being unpatentable over Nakane and Hayami in view of Osada (US 5,291,464)

Claims 29, 31 and 34 are patentable by virtue of their respective dependencies from independent claims 27 and 33.

Rejection of claim 25-26 and 42 under 35 U.S.C. § 103(a) as being unpatentable over Nakane and Hayami in view of Cloke (US 5,822,143)

Claims 25-26 and 42 are patentable by virtue of their respective dependencies from independent claims 21 and 38.

CONCLUSION

In light of the foregoing, claims 1-5, 21-42 and 49-50 are in condition for allowance, which is respectfully requested.


In the event any fees are due as a result of this Amendment, you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

If, after considering this response, the Examiner does not agree that all of the claims are allowable, then she is requested to schedule a phone interview with the Applicant's attorney at (425)-455-5575.

DATED this 30th day of May, 2007.

Respectfully submitted,

GRAYBEAL JACKSON HALEY LLP



J. Mark Han
Registration No. 57,898
Graybeal Jackson Haley LLP
155 - 108th Avenue N.E., Suite 350
Bellevue, WA 98004-5973
Phone: (425) 455-5575
Fax: (425) 455-1046
E-mail: mhan@graybeal.com